

From wang!elf.wang.com!ucsd.edu!info-hams-relay Wed Mar 20 17:01:08 1991 remote  
from tosspot  
Received: by tosspot (1.63/waf)  
via UUCP; Wed, 20 Mar 91 20:18:38 EST  
for lee  
Received: from somewhere by elf.wang.com  
id aa18009; Wed, 20 Mar 91 17:01:07 GMT  
Received: from ucsd.edu by news.UU.NET with SMTP  
(5.61/UUNET-shadow-mx) id AA18565; Wed, 20 Mar 91 10:29:39 -0500  
Received: by ucsd.edu; id AA17175  
sendmail 5.64/UCSD-2.1-sun  
Wed, 20 Mar 91 04:30:45 -0800 for nixbur!schroeder.pad  
Received: by ucsd.edu; id AA17161  
sendmail 5.64/UCSD-2.1-sun  
Wed, 20 Mar 91 04:30:41 -0800 for /usr/lib/sendmail -oc -odb -oQ/var/spool/  
lqueue -oi -finfo-hams-relay info-hams-list  
Message-Id: <9103201230.AA17161@ucsd.edu>  
Date: Wed, 20 Mar 91 04:30:32 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams-relay@ucsd.edu>  
Reply-To: Info-Hams@ucsd.edu  
Subject: Info-Hams Digest V91 #214  
To: Info-Hams@ucsd.edu

Info-Hams Digest                      Wed, 20 Mar 91                      Volume 91 : Issue 214

Today's Topics:

ACE AR 1000 Mods?  
First No-code Tech?  
Fun with Balloons and long wires!  
Info-Hams Digest V91 #210  
MAJOR SOLAR FLARE ALERT - 19 MARCH  
test

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: Tue, 19 Mar 1991 11:22:51 PST  
From: John\_L.\_Levin.El\_Segundo@xerox.com

Subject: ACE AR 1000 Mods?  
To: Info-Hams@ucsd.edu

I recently purchased an ACE AR1000 portable scanner. So far, I have been fairly pleased with it. It is quoted to have a receive range of 8-600MHz and 805-1300MHz, although with a random length long wire stuck into the end of the existing rubber-ducky antenna, I have been able to receive AM radio as low as 640KHz. I would like to be able to receive CW and SSB and am wondering if anyone knows of any mods to this scanner that would filter out the unwanted sideband.

Thanks,

John Levin  
KC6RJB

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Date: Tue, 19 Mar 91 15:18:58 CST  
From: Will Martin <wmartin@STL-06SIMA.ARMY.MIL>  
Subject: First No-code Tech?  
To: info-hams@UCSD.EDU

OK, I've silently been reading all the hoopla about the new no-code Tech licenses, and thought about sending this back on Feb. 15th, the magic day, but didn't. Anyway, that would have been too soon, I suppose.

So who was the first no-code Tech licensed?

^^^

I would have expected there'd be all sorts of publicity about this, with the guy or gal getting free radios, etc., like the millionth customer at the supermarket or something.

I suppose it would have all depended on just when the paperwork was sent in, and how it was shuffled at the FCC offices, and what form ended up on the top of the stack for processing on 2/15/91 (or would it have been the first one processed after that day, on Tuesday the 19th [Monday the 18th being a federal holiday]?), so it would have been a pretty fair contest...

Will  
(not a ham but now thinking about it...)

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Date: 15 Mar 91 16:55:56 GMT  
From: hpcc05!hpsciz!rkarlqu@hplabs.hpl.hp.com (Rick Karlquist)  
Subject: Fun with Balloons and long wires!  
To: info-hams@ucsd.edu

> / hpsciz:rec.ham-radio / moyer@brahms.udel.edu (Eric Moyer) / 7:48 am Mar 14, 1991 /  
>  
> I'm with the University of Delaware ARA and we're thinking about putting  
> a huge long wire antenna onto the end of a balloon and floating it up  
> above the shack. We'll probably use good 'ol 22 gauge magnet wire, so  
> the weight won't be all that great, but I haven't calculated it yet. I'd  
> like to try a 40 meter antenna if I can get enough lift.  
>  
> I'd be glad to receive any comments on the above, and would be  
> overjoyed to hear of any past experiences with balloon antennas.  
>  
> KA3YED on 28.460 MHz /--- The universe is laughing behind your back. -/

Wait a minute! If you're talking about the wire going straight up vertically to the balloon, the maximum gain at low angles occurs at a height of  $5/8$  wavelength, which on 40 meters is only 25 meters (80 feet). Making the wire longer than this causes most of the energy to go up at useless high angles. You shouldn't need a balloon just to get up 80 feet, and if you did use one, a 3 foot helium weather balloon costing \$5-10 will last all weekend for a contest.

I once tried 130 foot vertical for 160 meters this way, and the main problem is that if you get any wind at all, the wire talls way over at a 45 degree angle or worse. Also, the antenna (even during lulls in the wind) did not outperform my inverted-L at 50 feet. This test was conducted in January during the 160 meter CW contest.

Rick N6RK

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Date: 18 Mar 91 13:51:36 EDT  
From: Larry Jack <LJACK@UMAB.UMD.EDU>  
Subject: Info-Hams Digest V91 #210  
To: <Info-Hams@UCSD.Edu>

From: Larry Jack

In article <19630@brahms.udel.edu> moyer@brahms.udel.edu (Eric Moyer) writes:

>  
>I'm with the University of Delaware ARA and we're thinking about putting  
>a huge long wire onto the end of a balloon and floating it up  
>above the shack.....

A great idea and a lot of fun, as long as there are no thunderstorms

anywhere nearby.

For a number of years in another career I used to fly meteorological balloons 2 sample atmospheric profiles for environmental studies. Big ones- 12+feet in diameter, carrying heavy radiosondes up to +20,000 feet. From the East coast of the US we even got a few returned (the sondes) from Europe. But distance is another story. Needless to say, as a ham, with a seemingly endless supply of balloons and helium it wasn't long before the two meshed. We did learn a lesson worth passing on. Place a good insulator between the end of the long wire and the balloon. You would think this isn't necessary, but depending on your power levels the RF at the end of that wire can burn holes in the balloon. The results will be obvious if not spectacular. In fact, more than one may be necessary since things get pretty wet as the balloons will pick up considerable condensation even at relatively low altitudes. With a good ground system they will be a hard combination to beat on MF during contests.

These balloons will probably not fly high enough that you will need to notify the FAA. It might not hurt to file a NOTICE TO AIRMEN anyway. The number of the local FAA office is in the 'phone book, call them with the particulars of your "flight" - how high, the balloon size, fact it is static, etc.

An aside to all this. We used to fly these things 3 times a day for weeks on end. Big balloons with heavy equipment and parachutes (those balloons don't stay inflated forever) all connected in a long train by heavy nylon line. Every day a new NOTICE was filed with the FAA, so they got to know us pretty well. And these are not in the realm of the normal Notices they are used to getting, so this activity stuck out like a sore thumb even though we presented little threat to aircraft.

One day, being rather bored, my team took to filling balloons up and releasing them for the fun of it. Gradually we started tying rolls of toilet paper and other rubbishage to them to watch it stream slowly out over the countryside at 2000+ feet. Eventually someone got the idea about trying on Aluminium Foil. The roll we used was over 250 feet long, and the way it caught the evening sun made it look like a large red (colour of the balloon) flying spaceship shooting a gigantic ray gun at the earth (the light sparkling off the foil as it slowly twisted beneath the balloon). An strange and beautiful sight, we all agreed!.

Twenty minutes later the 'phone at our weather station rang and it was the FAA.

"My God, what ARE you guys flying?!" was their first comment.

"Oh, just our normal balloons" we lied. Something was wrong, but the FAA fellows weren't at all upset.

"We know that" was their response "But man, how big are those ARE those balloons?!" "We have something on Traffic Control Radar as big as the Hindenberg!"

Ah yes.... 250 feet of wide aluminium foil drifting slowly away, half a mile in the air. We forgot about Radar.....

We never owned up to this, and fortunately nothing ever came of it either. It goes without say aluminium foil was never flown again, even though we DID have clearance to fly "Big Balloons" --- I just don't think the authorities ever figured just how big we were capable of.

Larry KL7GLK/V77LJ

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Date: Tue, 19 Mar 1991 01:29:55 -0500  
From: oler@HG.Uleth.CA (CARY OLER)  
Subject: MAJOR SOLAR FLARE ALERT - 19 MARCH  
To: info-hams@ucsd.edu

-- MAJOR SOLAR FLARE ALERT --

MARCH 19, 1991

Flare Event Summary  
Potential Impact Assessment

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MAJOR ENERGETIC EVENT SUMMARY

Another major flare erupted from Region 6545 at 02:00 UT on 19 March. This event began at 01:57 UT, peaked at 02:00 UT and ended at 03:37 UT on 19 March. The event was associated with moderate intensity Type II and IV sweeps, but was fairly impulsive. The flare was rated a class M6.7/2B, but was associated with a low integrated x-ray flux. A 1,500 s.f.u. tenflare accompanied this event, as did a 23,000 s.f.u. burst at 245 MHz. The estimated Type II velocity is around 600 km/s. A SID/SWF also seems to have been observed with this flare.

POTENTIAL TERRESTRIAL IMPACT ASSESSMENT

No terrestrial impacts are expected from this flare, despite the fact that it possessed Type II and IV sweeps. The flare was actually quite small. The peak x-ray flux was of short duration. No protons are expected from this flare.

Protons have decayed and are now below the 1 p.f.u. level. However, the warnings for proton and possible PCA activity remain in effect due to

the potential which exists for proton flaring from Region 6545. This region is continuing to decay, but will remain capable of producing major flares for the next several days.

A POTENTIAL PROTON FLARE WARNING IS NOW IN EFFECT. Region 6545 is now in a very capable position for producing terrestrial proton activity. It also has the capability of producing a proton flare. Probabilities are currently rated near 50%. Polar regions should remain alert for possible PCA activity and HF signal blackouts.

Region 6555 (S22E67) is a very large and an apparently complex spot group. It also appears to be capable of producing major flares. It is believed this region could begin major flaring within the next two to five days. It is still too near to the eastern limb to discern any significant detail. More will be known over the coming days as this region rotates into better view.

From the detail that has been observed so far, it is apparent that this region covers an area of 3,000 million square kilometers. It currently encompasses 22 visible spots (although many more are likely present) and is classed as an FKI optical group. Several large spots are visible in close proximity to one another. It also appears as though a fair amount of shear exists in this system. Additional bulletins will be posted regarding this region over the next week.

\*\* End of Alert \*\*

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Date: Tue, 19 Mar 91 13:34:35 EST  
From: williams@nardacdc002.nardac-dc.navy.mil (bob williams)  
Subject: test  
To: info-hams@WSMR-SIMTEL20.ARMY.MIL

tesdt

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End of Info-Hams Digest  
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